(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization** International Bureau



(43) International Publication Date 13 January 2005 (13.01.2005)

PCT

(10) International Publication Number WO 2005/004370 A3

- (51) International Patent Classification7: G01R 31/08, G06F 11/00, H04J 1/16, H04L 1/00, 12/26, 12/28, 12/56
- (21) International Application Number:

PCT/US2004/019336

- 18 June 2004 (18.06.2004) (22) International Filing Date:
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/483,781

28 June 2003 (28.06.2003) US

- (71) Applicant (for all designated States except US): GEOPACKET CORPORATION [US/US]; 155 Grand Avenue, Seattle, Washington 98122 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TOWNES-VON STAUBER, Leon [US/US]; 17526 Densmore Ave. N., Shoreline, WA 98133 (US). ACHILES, Todd [US/US]; 1555 Grand Ave., Seattle, WA 98122 (US). CADY, Jerry [US/US]; 2347 Cypress Cove Circle, #403, Herndon, VA 20171 (US). LUCK, Richard [US/US]; 16125 Juanita-Woodinville Way, Unit 703, Bothell, WA 98011 (US).

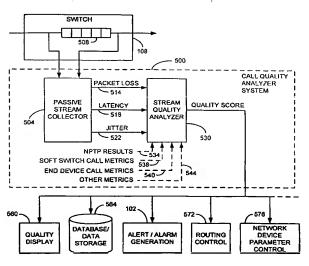
- (74) Agents: KANANEN, Ronald, P. et al.; Rader Fishman & Grauer PLLC, 1233 20th Street, NW, Suite 501, Washington, DC 20036 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: QUALITY DETERMINATION FOR PACKETIZED INFORMATION



(57) Abstract: A method for near real time quality analysis consistent with certain embodiments passively samples packets (616) from a stream of Internet Protocol (IP) packets that represent a communication session between a pair of end points carrying signals being transmitted over a transmission path in an IP network, and determines (620) in near real time at least two metrics from the sampled packets for the communication session. The at least two metrics include at least one metric that measures a quantity of lost packets, and at least one metric that measures a characteristic of packet timing. The method further involves calculating (632) a quality score in near real time using a quality formula that combines the at least two metrics. This abstract is not to be considered limiting, since other embodiments may deviate from the features described in this abstract.



WO 2005/004370 A3



 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report: 14 April 2005